



**MISSOURI DEPARTMENT OF TRANSPORTATION  
MATERIALS ENGINEERING  
Jefferson City, Missouri**

**Test Method  
MoDOT T11  
STATIC IMMERSION STRIPPING TEST**

**1.0 SCOPE**

**1.1.1** This test is primarily intended for use in evaluating anti-stripping compounds proposed for use as additives in asphaltic materials for cold-mix types of surfacing. The materials required for this test are MC-250 cutback asphalt, Osage River gravel (graded from 3/4", square sieve, to the No. 4 sieve) and the proposed anti-stripping compound.

**2.0 PROCEDURE**

**2.1** Weigh 1000 grams of gravel in a four quart white enamel pan. Immerse the sample in water for ten minutes at room temperature. Pour off the water leaving the surface of the gravel particles thoroughly wet. Immediately add 50 grams of MC-250 cutback asphalt, at a temperature of 125°F.  $\pm$  5°F containing the amount of anti-stripping compound recommended by the manufacturer, to the wet aggregate. The aggregate and cutback asphalt are thoroughly mixed by vigorously stirring the mixture for five minutes with a large spoon. The mixture is transferred to a second four quart white enamel pan and allowed to aerate for twenty-four hours at room temperature. After twenty-four hours aeration, the coated mixture is covered with tap water and allowed to stand for twenty-four hours at room temperature. At the end of the twenty-four hour immersion period, the mixture is visually inspected to determine the percentage of the surface of the gravel coated with the asphaltic material. The anti-stripping compound is considered acceptable for use at the manufacturer's recommended amount when more than 85 percent of the surface area of the gravel remains coated.

NOTE: Osage gravel used in this test is produced by the Capital Sand of Jefferson City at their plant located on the Osage River near Wardsville, Missouri, approximately six miles southeast of Jefferson City. However, Osage gravel from anywhere in this general vicinity would be of the same general type and characteristics.

